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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,974	08/10/2001	Hiroji Katsuragi	325772024200	4386

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EXAMINER
BUDD, MARK OSBORNE

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
925974	Katsuragi
Examiner	**Group Art Unit**
M. Bud)	3834

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

☒ Responsive to communication(s) filed on 10-15-02.

☒ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-25 is/are pending in the application.

Of the above claim(s)____ is/are withdrawn from consideration.

☐ Claim(s)____ is/are allowed.

☒ Claim(s) 1-25 is/are rejected.

☐ Claim(s)____ is/are objected to.

☐ Claim(s)____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The proposed drawing correction, filed on 10-15-02 is ☒ approved ☐ disapproved.

☐ The drawing(s) filed on____ is/are objected to by the Examiner.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number)____.

☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received:____.

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).____

☒ Notice of Reference(s) Cited, PTO-892

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Interview Summary, PTO-413

☐ Notice of Informal Patent Application, PTO-152

☐ Other____

Office Action Summary

claims 1-25 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are vague and indefinite in that they appear to claim the same structure twice using different nomenclature i.e. the "electra-mechanical transducer and the vibrating member" or, possibly, two separate elements are being claimed? This confusion makes it impossible to determine the metes and bounds of these claims. Also, regarding claims 7-9, 12, 14-19 and 25 which are understood to read on applicants fig. 2, the claims are inaccurate in that a disc does not have ends. Therefore, the electro mechanical disc transducer element cannot accurately be described as having one fixed end and one end a contact part.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

claims 1-4, 6, 10, 20 and 22 (as understood) rejected under 35 U.S.C. 102(a) as being anticipated by Thaxter.

Note Thaxter (fig. 2) teaches an elongated plate of piezo electric material fixed at one end with the other end coupled frictionally to a driven member. The element is poled in the thickness direction (col 4, lines 1, 2). The device is driven by a signal that alternates rapid expansion with slow contraction and vice versa to move the driven element in two or more directions.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

claims 5 and 23 (as understood) rejected under 35 U.S.C. 103(a) as being unpatentable over Thaxter in view of Tani.

As noted above, Thaxter teaches the motor structure. Thaxter does not explicitly teach the use of a coating or cover to the contact portion. However, Tani clearly teaches a friction enhancing and/or wear preventing material (e.g. #12, #1121) is desirable for the noted functions. Thus to provide a wear preventing layer for Thaxter would have been obvious to one of ordinary skill in the art.

claims 11-13, 21, 24 and 25 rejected under 35 U.S.C. 103(a) as being unpatentable over Thaxter in view of Shimizu Chang or Kolm.

Thaxter (fig 3) teaches a driving apparatus having multiple electra-mechanical elements expanded and contracted at different rates to position or manipulate a driven element. It has long been held that making parts integral or separable is a manipulation within the skill expected of the routineer Kolm (note fig 10), Chan (figs 1-3, 9, 10 and 14) and Shimizu (e.g. figs 3, 13, 14, 21) teach it is well known to construct a multi electrode piezo actuator as one piece rather than separate elements. Thus to provide the individual piezo elements of Thaxter as one integral (monolithic) piece would have been obvious to one of ordinary skill in the art.

Due to the confusing nature of claims 7-9, 12 and 14-19 regarding a disc fixed at one end (and the lack of a adequate disclosure for such a device) it is not possible to apply prior art to these claims at this time.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

MARK J. BUDD
PRIMARY EXAMINER
ART UNIT 212

M BUDD/pj

12/02/02